



**Non-Time Critical Removal Action at the
Manor View Dump Site, Odenton, Maryland**
Fort George G. Meade – Anne Arundel County,
Maryland

WELCOME
to the Fort Meade Public Information
Meeting – Engineering
Evaluation/Cost Analysis for Manor
View Dump Site

Please Sign-in at the Sign-in Table
Thank you

November 9, 2011
6:30 PM



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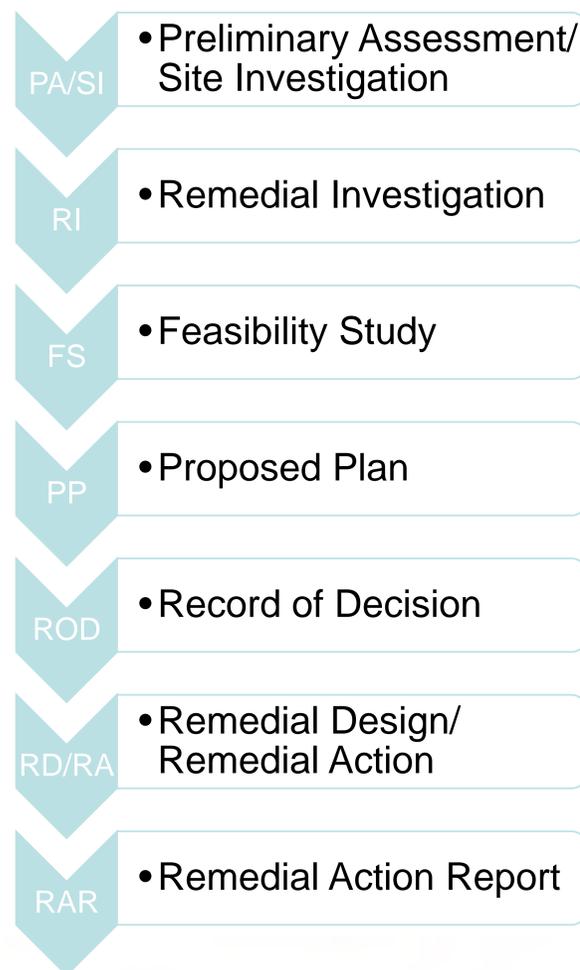


Fort George G. Meade Manor View Dump Site Meeting Purpose



Fort George G. Meade environmental investigations are completed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund

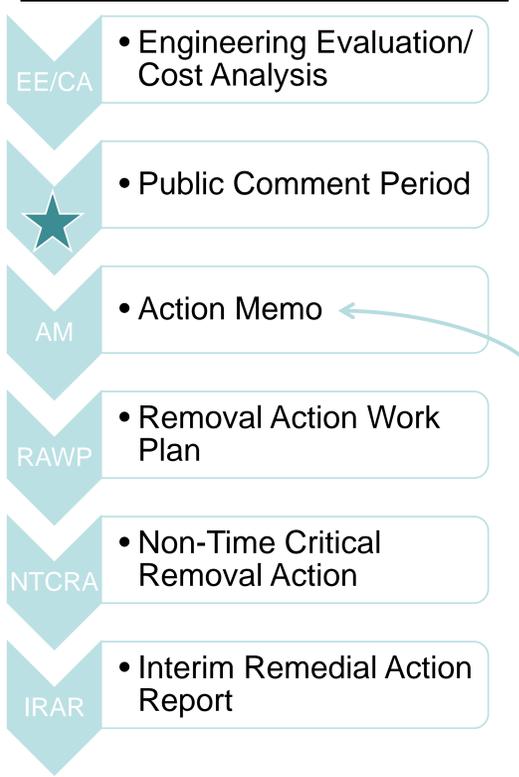
CERCLA¹ Process



A Removal Action can be triggered during the CERCLA process by the identification of at least one of eight criteria listed in the Nation Contingency Plan². The site meets the following two criteria:

1. Threat of fire or explosion³
2. Other situations or factors that may pose threats to public health or welfare of the United States or the environment⁴

Non-Time Critical⁵ Removal Action Process



EE/CA: Identifies the objectives of the removal action and analyzes the effectiveness, implementability, and cost of various alternatives that may satisfy these objectives

Preferred Remedy
 Subject to 30 day Public Comment Period (November 1 – 30, 2011)
 See back of Meeting Agenda for information on how to submit comments

EE/CA Alternative Comparison:

1. No Further Action
Effectiveness: Not effective
Implementability: Not implementable
Cost: No cost
2. Augmentation of Existing Gas Migration Control System
Effectiveness: Relatively low short term risk, but only likely to be moderately effective in the long term
Implementability: More implementable than Alternative 3
Cost: \$1,500,000
3. Focused Removal Within the Western Portion of the Site and Off-Site Disposal
Effectiveness: Permanent solution which is highly effective in the long term
Implementability: Most intrusive alternative and presents the greatest implementation challenges, but is implementable
Cost: \$2,500,000

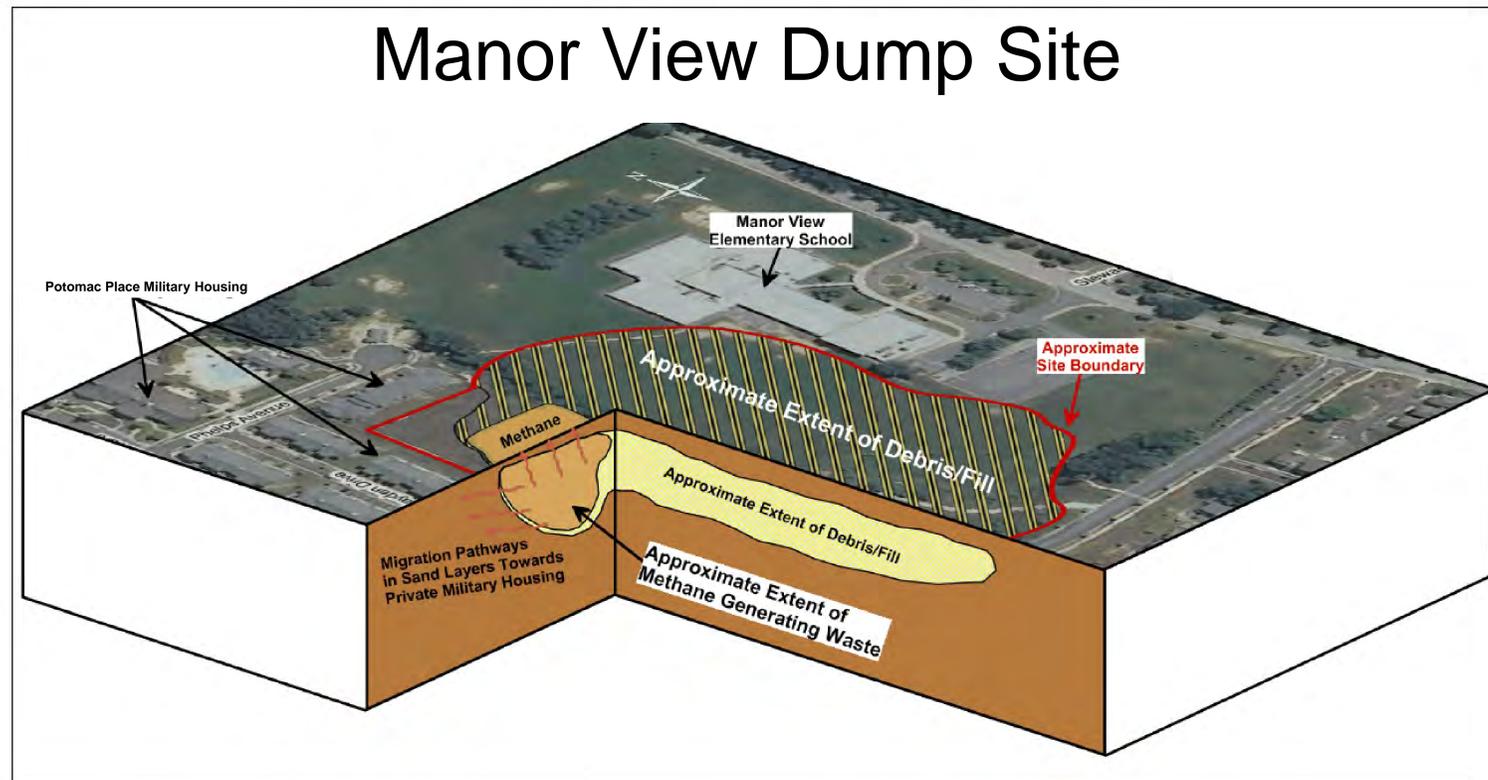
Footnotes:
 1. For more details on CERCLA, visit www.epa.gov/superfund/policy/cercla.htm
 2. National Oil and Hazardous Substance Pollution Contingency Plan, Section 300.415(b)(2)
 3. National Oil and Hazardous Substance Pollution Contingency Plan, Section 300.415(b)(2)(vi)
 4. National Oil and Hazardous Substance Pollution Contingency Plan, Section 300.415(b)(2)(viii)
 5. An action is deemed 'Non-Time Critical' if a planning period of 6 months or more exists (USEPA Office of Solid Waste and Emergency Response Directive 9360.0-32)



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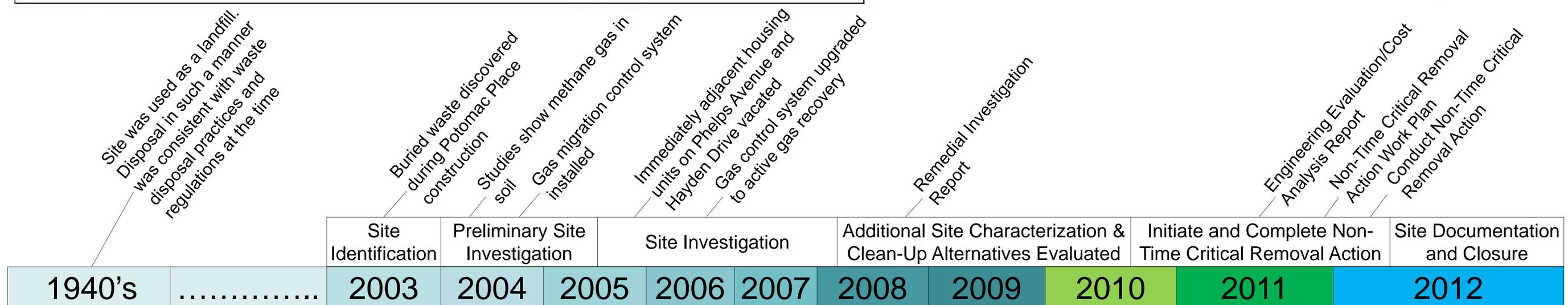
Fort George G. Meade Manor View Dump Site Project Overview and Timeline



Site Description: The Manor View Dump Site is an approximately 10 acre site near the intersection of MacArthur Road and 2nd Corps Boulevard in the northern portion of Fort Meade

The Problem: One acre of buried waste is decomposing and generating methane at unsafe levels

Preferred Remedy: Remove methane generating waste and haul waste to an approved off-site landfill for proper disposal



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Fort George G. Meade Manor View Dump Site Preferred Remedy

Excavate methane generating wastes from the Site and haul wastes to an off-Post landfill for proper disposal



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Current Site Conditions

- One acre of buried waste is decomposing and generating methane above the lower explosive limit of 50,000 parts per million by volume
- Methane is migrating underground in a westerly direction towards Potomac Place, and methane is captured by the gas migration control system
- The system currently draws methane out of the ground and away from the residential properties
- Inert debris present below the existing soil cover poses no risk to faculty, students, or community residents
- Methane generating waste poses no risk to Manor View Elementary
- Methane levels are monitored weekly



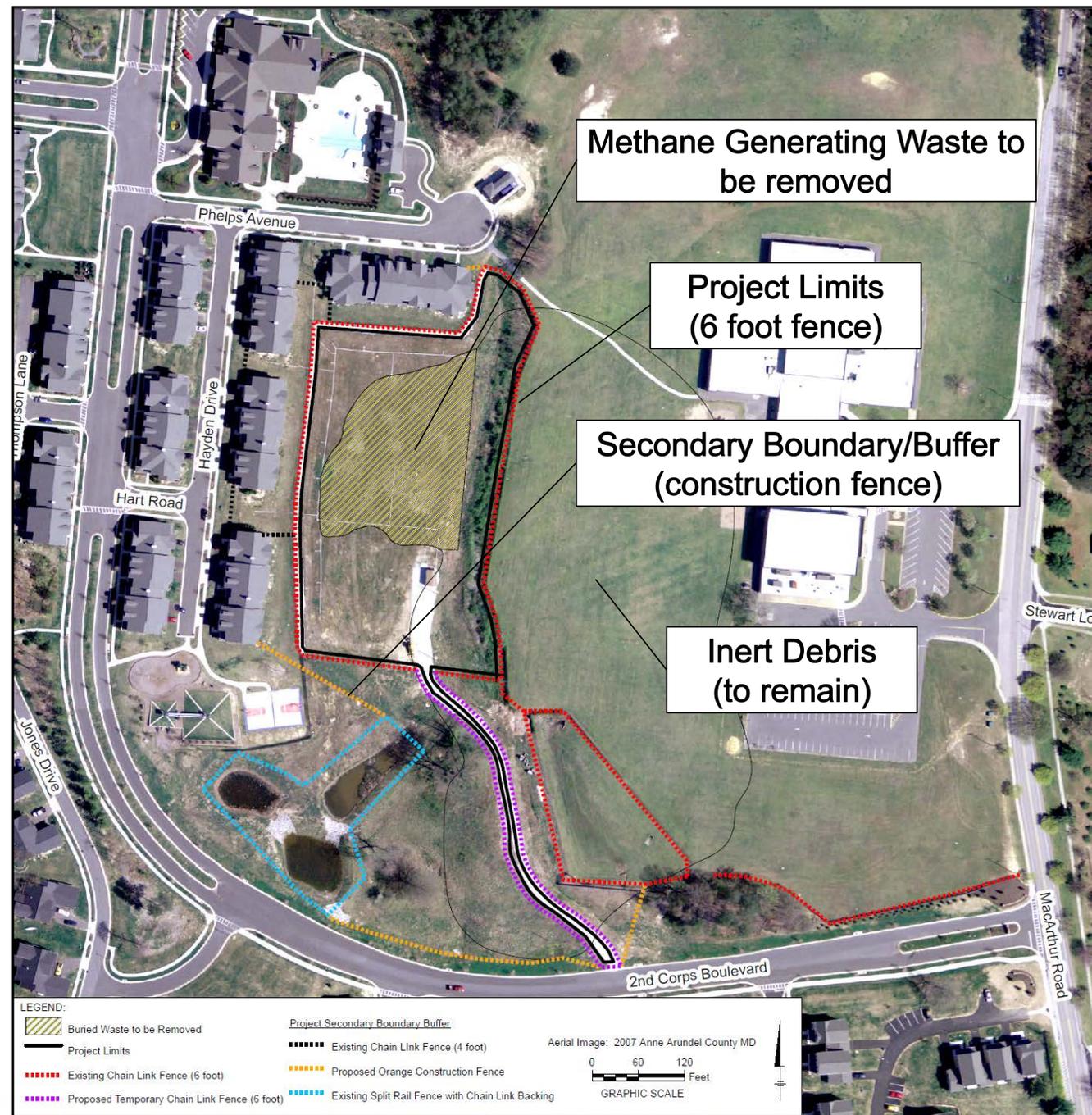
Current view of Manor View Dump Site facing south



Current view of Manor View Dump Site facing northwest

What is methane?

- Methane is formed when a carbon source (i.e. buried waste), water, and a lack of oxygen are present.
- Also known as natural gas, methane is an odorless and colorless gas. Methane can form within landfills as a natural byproduct when organic waste biodegrades.
- Methane is not toxic, but can pose a safety hazard at certain concentrations (above the Lower Explosive Limit) and is an asphyxiation hazard.
- Methane is lighter than air and migrates upward through the soil via path of least resistance (through sandy soils rather than clayey soils)



Project Timeframe: Winter - Spring 2012 (14 weeks)

Objective of Project

Project is being implemented under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (a.k.a. Superfund) Removal Action Authority

Purpose: Eliminate the potential hazard posed by methane above the lower explosive limit that is being generated from methane generating wastes buried within the Manor View Dump Site

Preferred Remedy: This project eliminates the source of the hazard (removes methane generating wastes from the ground) rather than treat the symptoms (control methane migration)

Process: Before proceeding, CERCLA required an Engineering Estimate/Cost Analysis (EE/CA) Report to evaluate possible removal alternatives

How Can I Be Involved?

The Final EE/CA is available for public review and comment

- The document can be reviewed at the West County Area Library or www.fortmeade-ems.org
- Public Comment Period is from November 1 – 30

This project and other environmental projects are discussed at Fort Meade's Restoration Advisory Board Meetings

- Next meeting is November 17 at 7 PM at the Captain John Smathers Army Reserve Center, Highway 175 between 20th and 21st streets, Fort Meade, Maryland.

Scope of Proposed Project

- Establish a secure perimeter (chain link fence) and a secondary boundary/buffer (construction fence)
- Install site controls (erosion and sediment, storm water, and traffic)
- Excavate all methane generating wastes capable of generating methane above the lower explosive limit
- Transport waste to an approved off-Post landfill for proper and permanent disposal
- Backfill excavation with soil
- Restore site to a level grass field



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Fort George G. Meade Manor View Dump Site

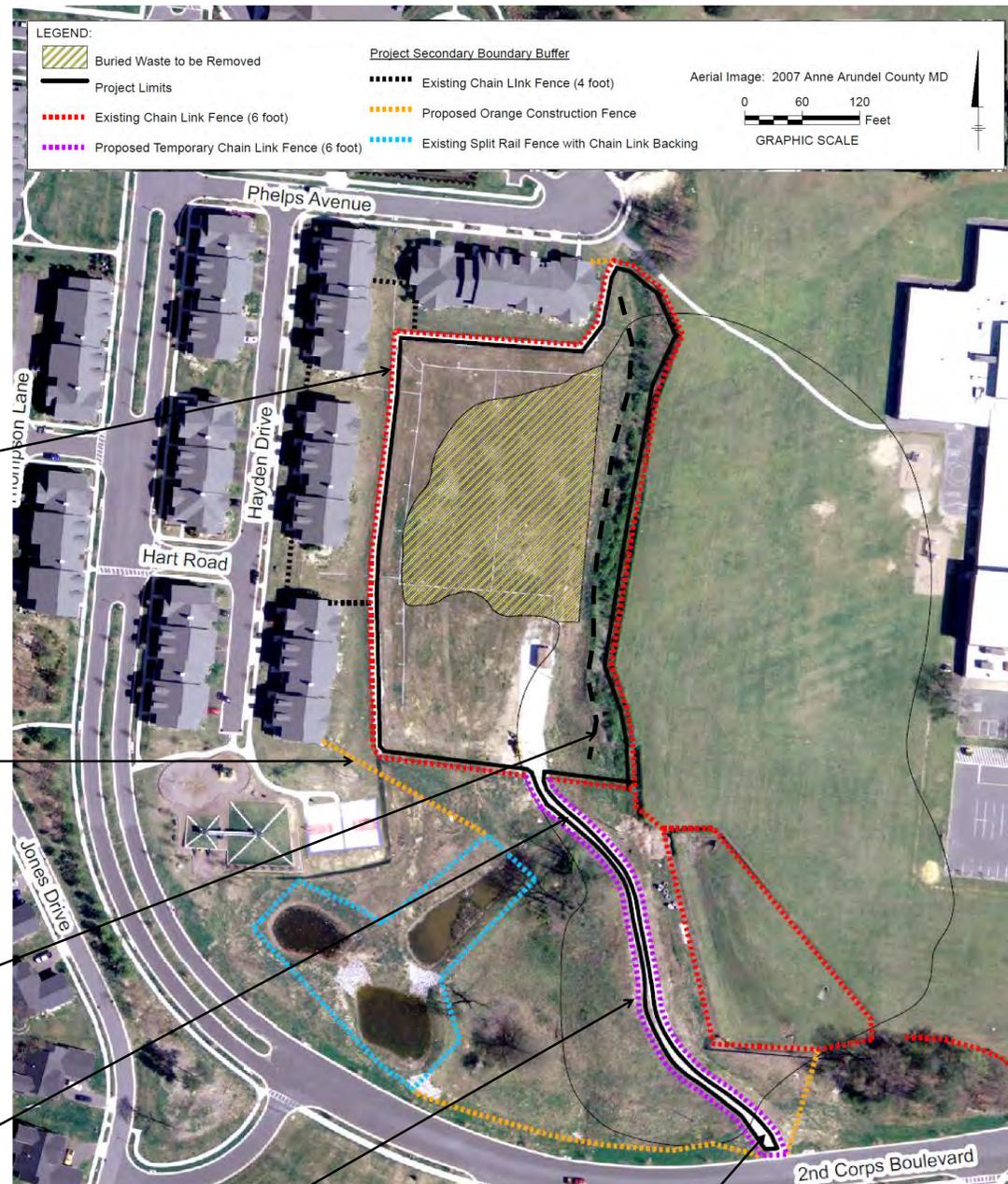
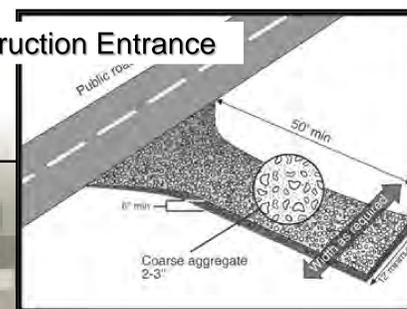
Proposed Site Controls



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Mobilize Resources and Establish Site Controls

- Approximately 8 people and 5 pieces of equipment
- Work hours: Mon – Fri 7:00 AM – 5:00 PM
 - No weekend work - unless approved on a case by case basis
 - No work on Federal Holidays
- Site Controls Include:
 - Perimeter Security Controls (existing fence, existing signs, orange construction fence, and temporary chain link fence and locked gates)
 - Stormwater and Erosion and Sediment Controls (silt fence, construction entrances, and berms approved by MDE)



Minimizing the Impact to the Community

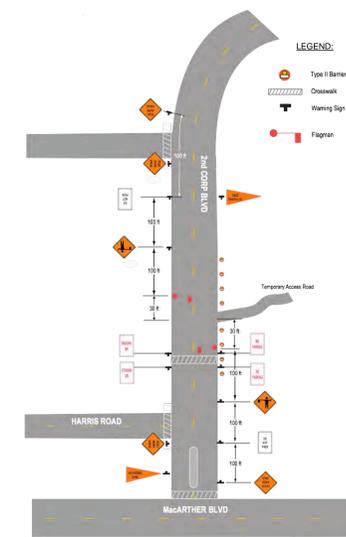
Odor and Dust Control

- Working during winter minimizes the generation of odors and dust
- Odor and Dust will be controlled by:
 - Minimizing the amount of waste exposed at one time
 - Sequence the excavation of soil that is covering the waste
 - Utilize soil as a 'daily cover' similar to practices at operating landfills
 - Fragrance and masking agents
 - Odor control foam
 - Use of a water truck (pictured at right)



Noise and Traffic Control

- Construction noise will be minimized using administrative and engineering controls
 - Administrative controls affect behaviors to minimize noise (e.g. restricting throttle speed of equipment, restricting working hours, selecting quieter construction methods)
 - Engineering controls are physical/mechanical methods of reducing noise (e.g., piling soil to serve as noise shielding)
- A traffic plan (picture at left) will control the flow of construction traffic to and from the site



Air Monitoring

- Real time air monitoring will test the air for:
 - Methane
 - Hydrogen sulfide (e.g. rotten egg smell)
 - Volatile Organic Compounds (e.g. solvent vapors)
 - Particulates (dust)
- Air monitoring equipment will surround the Site to ensure that the community is protected



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Fort George G. Meade Manor View Dump Site Excavation, Transportation, and Disposal



Excavation of Methane Generating Waste

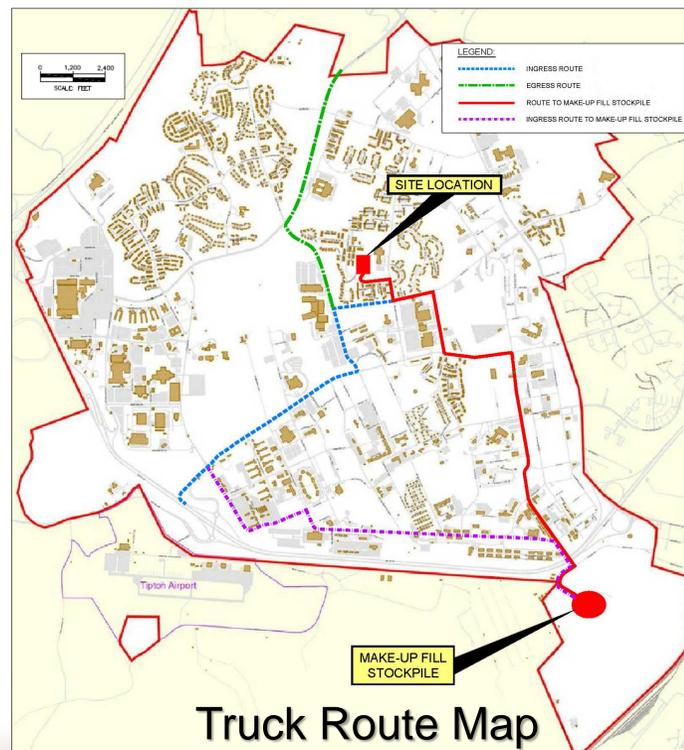
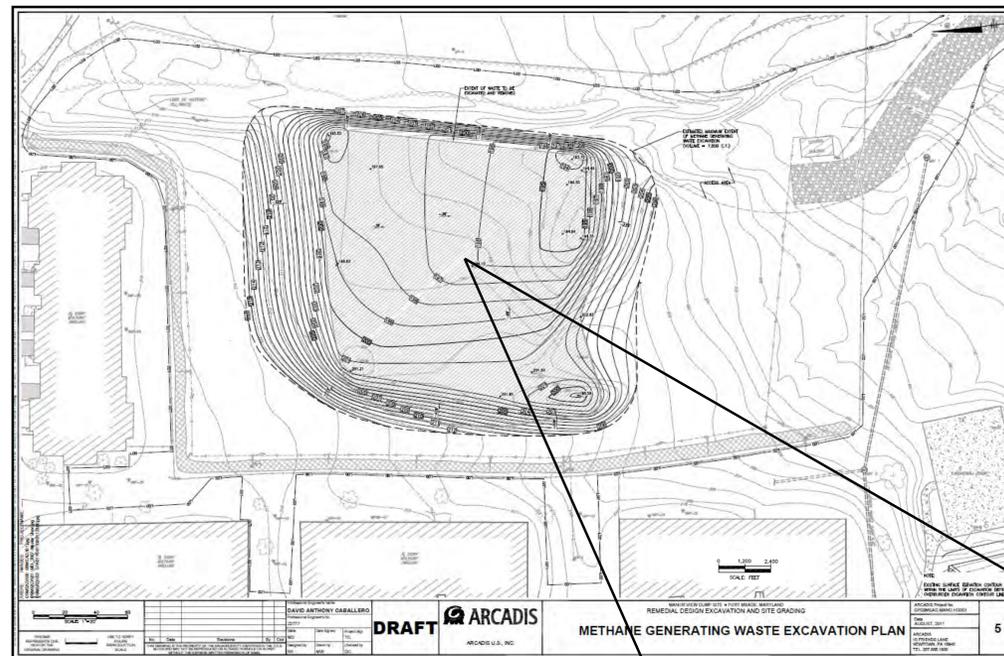
- Remove and save 9,500 cubic yards (cy) of soil currently on top of the methane generating waste
- Remove and load 7,800 cy of methane generating waste¹
- Haul methane generating waste to an approved off-Post landfill for final proper disposal

Truck and Traffic Controls

- Truck Restrictions from 7:35 - 8:35 AM and 2:00 - 3:00 PM
 - No trucks will enter or exit the site during these periods
 - Adjusted as needed to account for school schedule variations
- Signage and controls on 2nd Corps Boulevard
- No parking on 2nd Corps Boulevard during work hours
- Lockable gate at 2nd Corps Boulevard entrance
- Traffic flagger during times of heavy truck traffic



- 100 trucks per week
- 20 trucks per day
- 3 trucks per hour



The EXCAVATION
250 ft wide x 200 ft long
x 15 ft deep

Nearly 3 Olympic sized swimming pools of soil will be excavated and saved as backfill

Approximately 400 dump trucks of methane generating waste will be taken to an approved off-Post landfill



Excavation equipment that will be typical of equipment used at Manor View Dump Site



Questions & Answers

Will there be odor or dust?
Odor and dust are a potential with any construction project, and the Army is taking steps to minimize odor and dust. Odor and dust will be monitored throughout the entire project (See Proposed Site Controls Poster).

What does this project mean to my family?
No significant impacts to daily routines are expected.

Is my Drinking Water Impacted?
No. Drinking water at Fort Meade is supplied by a community water system which does not draw water from this area.

Footnote:
1. Although never discovered, contingency plans have been developed to respond to the discovery of munitions and explosives of concern, drums, asbestos, or cultural resources.



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Fort George G. Meade Manor View Dump Site Site Restoration



Site Restoration

- Establish permanent vegetation
- Place 6 inches of clean topsoil
- Place 18 inches of clean soil
- Place geotextile fabric to mark top of overburden soil
- Place overburden soil in bottom of excavation



After the Project

- The existing gas migration control system (relocated underground as part of the project) will remain dormant, but can be turned on if needed
- The Army will continue weekly monitoring for methane
- Methane monitoring frequency may be reduced in the future with concurrence from USEPA and MDE
- Project success results in the re-occupancy of Potomac Place Townhomes

Proposed Final Site Conditions



Backfilling of clean soil and topsoil



Backfill on a slope (similar to eastern edge of excavation)



Chain Link Fenced Removed



Geotextile installation

Current Gas Migration Control System Relocated Underground

Level Open Field

5 Feet High Slope

Control Building Relocated to Perimeter



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